



# Where We Stand: 8th Edition

## Update 3: Income

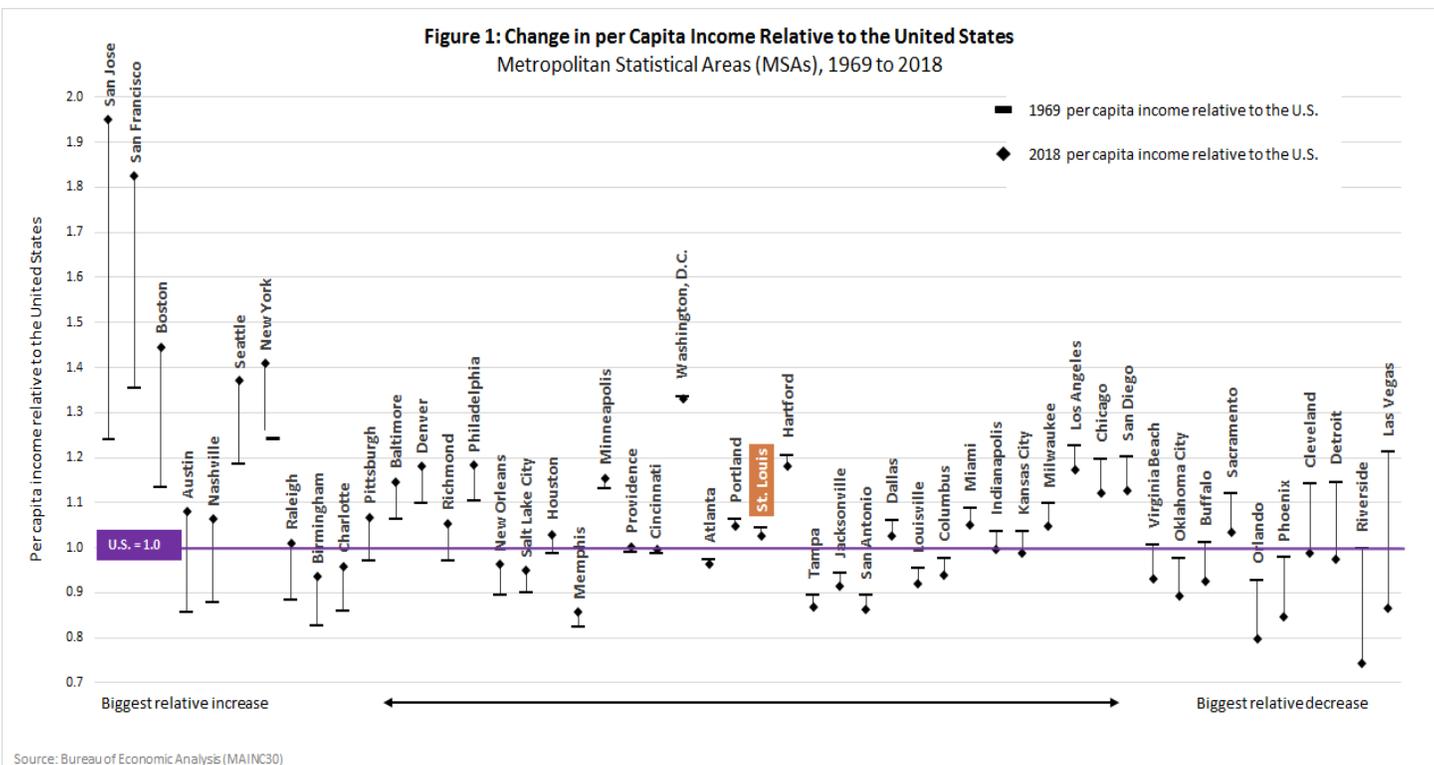
January 2020

Over the last half century, a few coastal metropolitan regions enjoyed income growth that was much faster than the national average. Some regions, including both some Sunbelt Metropolitan Statistical Areas (MSAs) and some northern industrial “rustbelt” MSAs saw income levels decline relative to the rest of the country. And there were some metropolitan areas, including St. Louis, that barely budged relative to the rest of the country.

This report draws on nearly 50 years of economic data from the Bureau of Economic Analysis (BEA), which offers the most complete available time series on personal income at the metropolitan level. In its definition of income, BEA includes employer contributions to pensions and Social Security, as well as Medicare benefits. While these categories of payments are considered income by economists, they are not included in the Census Bureau’s computation of per capita income (PCI). As a result, the PCI reported by BEA is significantly higher than that found in Census data. For the St. Louis MSA, 2018 PCI was listed as \$55,883 by BEA, compared to \$35,569 in Census data. While both definitions are valid, it is important to be clear which definition is used in a given analysis. This report uses BEA estimates.

To compare PCI levels across metropolitan regions and across time, the following device is used: For each year, each MSA’s PCI is divided by the U.S. PCI. This results in a ratio that can be tracked over time. For example, in 1969, PCI for the United States was \$3,931. The San Jose MSA had a PCI of \$4,875. Dividing the PCI for San Jose by that of the United States yields a ratio of 1.24, meaning that San Jose’s income was 24 percent higher than that of the United States in 1969. In 2018, U.S. PCI was \$54,446, compared to \$106,213 for San Jose. The ratio in 2018 was 1.95, meaning that San Jose’s PCI was nearly double that of the country. The difference between the two ratios (1.95 - 1.24 = 0.71) represents change in per capita income relative to the United States over this time period.

Figure 1 is a graphical representation of changes in relative income levels from 1969 to 2018. MSAs are ordered by change in income relative to the United States, with the biggest gainers on the left, and those with the biggest relative declines on the right. The beginning of each arrow indicates the income of the MSA relative to the United States circa 1969. The tip of the arrow points to the same for 2018.



1969 to 1979

Five MSAs stand out as having prospered the most over the last half century: San Jose, with an income ratio going from 1.24 to 1.95, San Francisco (1.35 to 1.83), Boston (1.13 to 1.45), Seattle (1.19 to 1.37), and New York (1.26 to 1.41). Each saw its per capita income rise relative to the rest of the nation by the equivalent of at least 10 percent of PCI, and each reached per capita income levels at least 35 percent greater than the national average.

Two other regions also experienced robust growth rates, although both began well below the national average. In 1969, Austin's PCI was 14 percent lower than the national average. By 2018, Austin's PCI was 8 percent higher than that of the United States. The most explosive growth in Austin's per capita income occurred during the "dotcom bubble" of the late 1990s, discussed on page 4. Similarly, Nashville's PCI went from 12 percent lower than the United States to 6 percent higher. The major force behind Nashville's income growth was the for-profit hospital industry.<sup>1</sup> Throughout the last five decades, St. Louis has been remarkably stable. In 1969, the PCI in St. Louis was 4 percent higher than the national average. By 2018, this dropped slightly to 3 percent.

The following figures show how the 50 most populous MSAs fared in each of the major business cycles from 1969 through 2018. Where We Stand tracks the St. Louis region among these MSAs, referred to as the peer regions.<sup>i</sup>

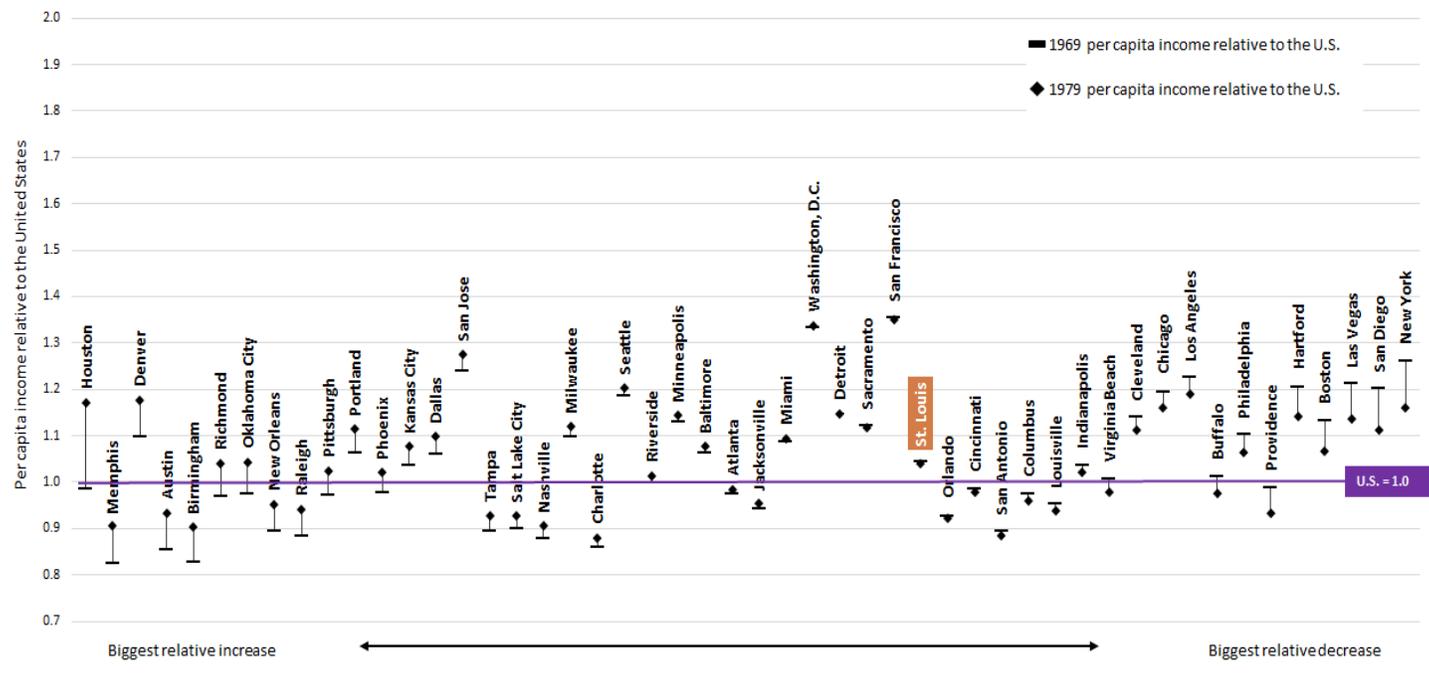
Visit [ewgateway.org/www/PCI](http://ewgateway.org/www/PCI) to access a new interactive tool that you can use to track changes in per capita income among the peer regions over the last 50 years.

The 1970s are best remembered as an era of inflation, although price increases varied dramatically across different products. The largest increase in price levels were restricted to food and energy. Prices of manufactured goods barely moved, even in nominal terms.<sup>2</sup> Regions that specialized in energy production, most notably Houston, and those that specialized in agriculture, including Riverside, did relatively well in the 1970s. Several southern regions including Memphis, Austin, and Birmingham were among the poorest metropolitan regions in 1969. While their income levels remained relatively low, by 1979 they had moved closer to the national average. A portion of this movement may be attributed to a longstanding trend of wage convergence, although Great Society social spending also played a role in raising income levels in these regions.

Large manufacturing centers such as New York and Boston saw income levels fall relative to the rest of the country, as industries began moving both to the Sunbelt and to smaller metropolitan regions. In 1969, 9.5 percent of all wages in the U.S. manufacturing sector were paid to workers in the New York region. By 1979, New York's share of manufacturing wages had dropped to 7.0 percent. Similar reductions took place in Boston, Providence, and Buffalo. San Diego and Hartford also saw falling military employment as a result of spending realignments following the Vietnam War.

Despite the economic upheavals in the decade, St. Louis remained remarkably consistent. It began and ended the decade with a per capita income level that was 4 percent higher than the national average.

**Figure 2: Change in per Capita Income Relative to the United States**  
Metropolitan Statistical Areas (MSAs), 1969 to 1979



Source: Bureau of Economic Analysis (MAIN30)

<sup>i</sup> Metropolitan Statistical Areas (MSAs) are geographic entities delineated by the Office of Management and Budget (OMB). MSAs are areas with "at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties." The MSAs analyzed in this report were the most populous as of 2018.

## 1979 to 1989

The 1980s saw the ascendance of finance, and a relative decline in manufacturing. From 1979 to 1981, the Federal Reserve System under the leadership of Paul Volcker raised interest rates to fight inflation, allowing the effective federal funds rate to spike at nearly 20 percent in early 1981.<sup>3</sup> The resulting recession of 1981 to 1982 was, at that time, the steepest since the Great Depression. Manufacturing employment dropped from 21.5 million in 1979 to 18.9 million in 1983, a loss of 2.5 million jobs. Manufacturing employment recovered somewhat after 1983, stabilizing between 19 and 20 million for the remainder of the decade.<sup>4</sup>

Three inter-related factors led to the rise of finance in the 1980s. The first factor was the record federal budget deficits. These deficits led to high real interest rates, attracting capital from foreign investors and causing the dollar to appreciate in foreign currency markets.<sup>5</sup> For several years in the late 1980s, foreign investors were eager to purchase dollar-denominated assets, whether real estate, stocks, or bonds. Second, financial deregulation made it possible for new actors, most notably savings-and-loans, to participate in risky lending practices.<sup>6</sup> The third factor was financial innovation. Michael Milken of the investment firm Drexel-Burnham-Lambert pioneered the rise of high-risk “junk” bonds. These became a favored vehicle of corporate takeover artists who undertook leveraged buy-outs (LBO) to finance mergers and acquisitions (M&A).<sup>7</sup>

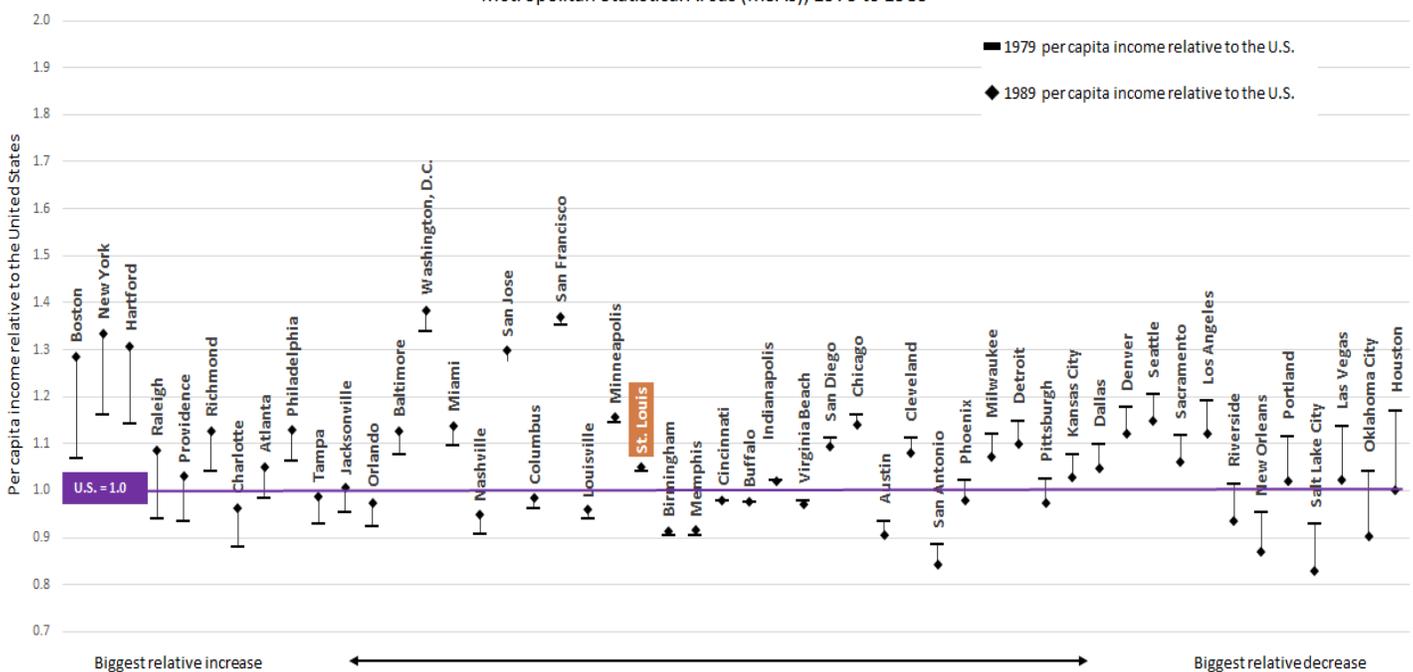
In 1979, earnings in the manufacturing sector accounted for 20 percent of total personal income in the United States. By 1989, that share dropped to 15 percent. In the same time period, financial income (including dividends, interest, and rent, as well as earnings in the banking, securities, and holding company industries) increased its share of personal income by nearly six percentage points.<sup>ii</sup>

Regions that specialized in financial services saw the largest increases in per capita personal income in the 1980s. In 1979, Boston’s per capita income was 6.7 percent higher than the national average. By 1989, Boston’s income premium had expanded to 28.4 percent. At the same time, New York’s income advantage doubled to 33 percent. Hartford’s income premium also more than doubled in the 1980s.

Falling oil prices depressed income levels in the Southwest and Gulf Coast. Houston, Oklahoma City, and New Orleans were among the regions with the largest declines in PCI relative to the rest of the country. Las Vegas continued its transition from a mining economy to a tourist economy, seeing explosive population growth but a lower average income. Several large manufacturing regions, including Detroit, Cleveland, Milwaukee, and Pittsburgh, all saw falling relative income levels.

St. Louis, again, was the model of consistency. It began the decade with a per capita income level that was 4 percent higher than the national average; by 1989, this had ticked slightly upward, to 5 percent.

**Figure 3: Change in per Capita Income Relative to the United States**  
Metropolitan Statistical Areas (MSAs), 1979 to 1989



Source: Bureau of Economic Analysis (MAIN30)

<sup>ii</sup> Total income is the sum of earned income and unearned income. Earned income includes both wage and salary income and business income. Unearned income includes transfer payments such as Social Security, as well as dividends, interest, and rent. As used in this section, “financial income” includes dividends, interest, and rent, as well as earnings in the banking, securities, and holding company industries.

## 1989 to 2000

The 1990s were the era of the “dot-com” bubble. Large pools of money entered the U.S. stock market, partly from East Asia, and partly from corporations taking advantage of falling corporate interest rates to finance stock repurchases.<sup>8</sup> Following the explosion of share prices in Netscape’s initial public offering, many of these investment dollars were funneled to stocks related to information technology, and particularly the newly developing Internet. In the rush to buy up technology stocks, values became divorced from actual earnings. In several Internet-related sectors, the price of stocks exceeded earnings by factors of more than 1,000.<sup>9</sup> The decoupling of earnings from stock prices led Alan Greenspan, Chairman of the Federal Reserve, in 1997 to caution investors against “irrational exuberance,” a warning that went largely unheeded.

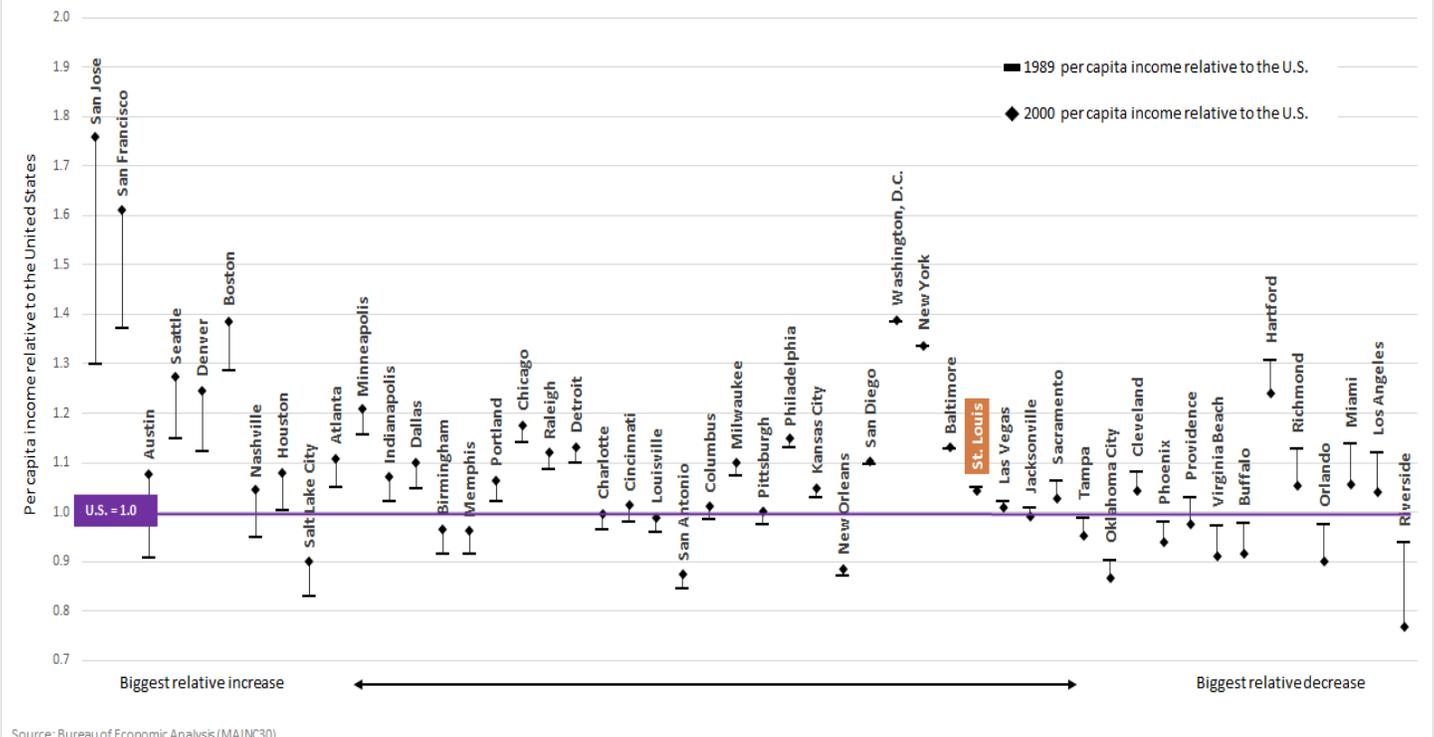
High stock prices created paper wealth, which allowed an increase in consumer spending. This spending, in turn, stimulated both the U.S. and the world economies. Paul Volcker drily observed in 1999 that “the fate of the world economy is now totally dependent on the growth of the U.S. economy, which in turn is dependent on the stock market, whose growth is dependent upon about 50 stocks, half of which have never reported any earnings.”<sup>10</sup>

Not surprisingly, the regions that prospered most in the 1990s were those that specialized in information technology, and particularly Internet technology. The Bay Area saw the fastest income growth, with PCI levels in San Jose rising to 75 percent higher than the national average. San Francisco’s PCI rose to more than 60 percent higher than the United States. Seattle, with Microsoft, and Boston, with the Route 128 technology corridor, also enjoyed rapidly rising income levels in this time period.

Austin also had rapid income growth in the 1990s, climbing above the national average for the first time. In the 1980s, the region successfully competed for the Microelectronics and Computer Technology Corporation (MCC), a research consortium authorized by federal legislation in 1984. The site was selected by retired admiral and Texas native, Bobby Inman. MCC was credited with creating Austin’s reputation as a technology hub.<sup>11</sup> Austin also had the good fortune of being the hometown of Michael Dell, founder of Dell Computers. These factors positioned Austin to prosper in the technology-obsessed 1990s.

Several Sunbelt cities that experienced rapid population growth experienced falling PCI levels relative to the United States. Examples include Riverside, Miami, Orlando, and Phoenix. These regions succeeded at attracting large numbers of low-wage jobs, but this did not translate into higher average incomes. St. Louis dropped slightly relative to the United States. St. Louis began the period with an income level 5.1 percent higher than the national average; this dipped slightly to 4.4 percent in 2000.

**Figure 4: Change in per Capita Income Relative to the United States**  
Metropolitan Statistical Areas (MSAs), 1989 to 2000



Source: Bureau of Economic Analysis (MAINC30)

## 2000 to 2007

The first years of the 21<sup>st</sup> Century were the period of the housing bubble.

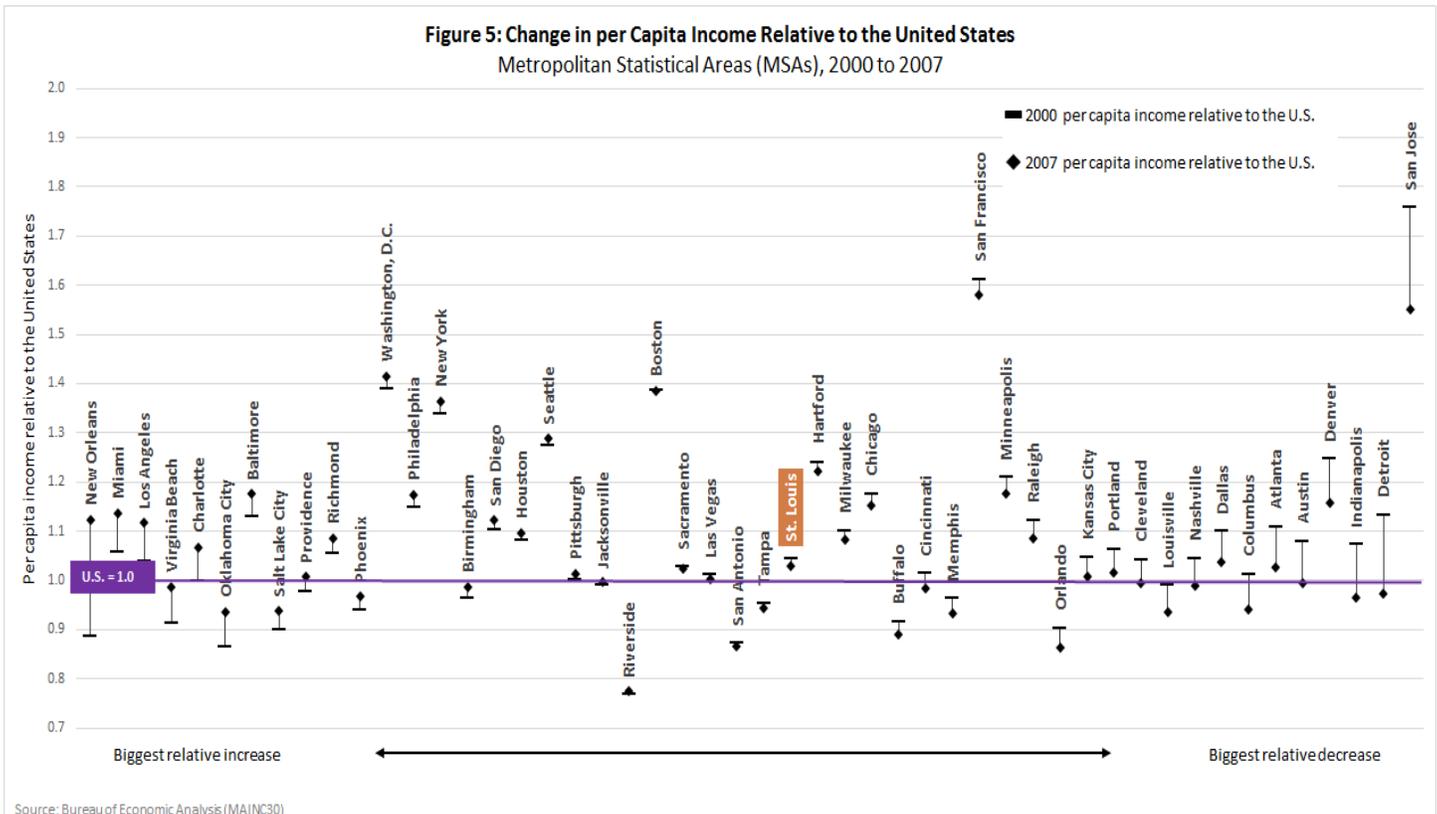
The technology-centered NASDAQ stock exchange reached its peak in March 2000 with the NASDAQ composite more than 10 times higher than its level a decade earlier. The bubble was deflated when a series of poor earnings reports prompted a mass selloff. Within two years, the NASDAQ composite had lost more than 75 percent of its value, with some major technology companies suffering even more severe losses.<sup>12</sup> The evaporation of paper wealth, a continued slide in manufacturing industries, and a further hit to stocks following the 9/11 attacks pushed the U.S. economy into a mild recession.

The Federal Reserve Board responded decisively to the economic downturn, cutting the federal funds rate from 6.5 percent in late 2000 to just 1 percent in January 2004. Low long-term interest rates fueled increases in housing values, as first-time buyers entered the market. In the boom times, financial companies relaxed lending standards to offer loans to homes that would not qualify for prime mortgages. These risky loans, in turn, were underwritten thanks to a baroque system of mortgage-backed securities sold to pension funds and other institutional investors seeking high rates of return. The Financial Crisis Inquiry Commission concluded that lax regulatory supervision contributed to the proliferation of risky mortgages, as did a failure of credit rating agencies.<sup>13</sup>

The housing bubble influenced the flow of income among metropolitan regions. New Orleans, with the largest income gain, was an anomaly, as its shift in average income was influenced by the dislocation of lower-income residents in the wake of Hurricane Katrina. Miami and Los Angeles were the next two regions with the greatest income growth. In each region, home prices doubled between 2002 and 2006.<sup>14</sup> In Charlotte, the largest driver of income growth in this period was the credit intermediation industry. This indicates that Charlotte residents profited from association with mortgage markets.

Regions with declining income levels relative to the rest of the country included San Jose and San Francisco, both of which took several years to recover from the dot-com crash. Other MSAs with lower levels of income growth included regions largely unaffected by the housing bubble, such as Detroit and Indianapolis.

St. Louis saw a small relative decline in PCI in this period, declining to a PCI level that was 2.8 percent above the national average. Again, this was a fairly small change.

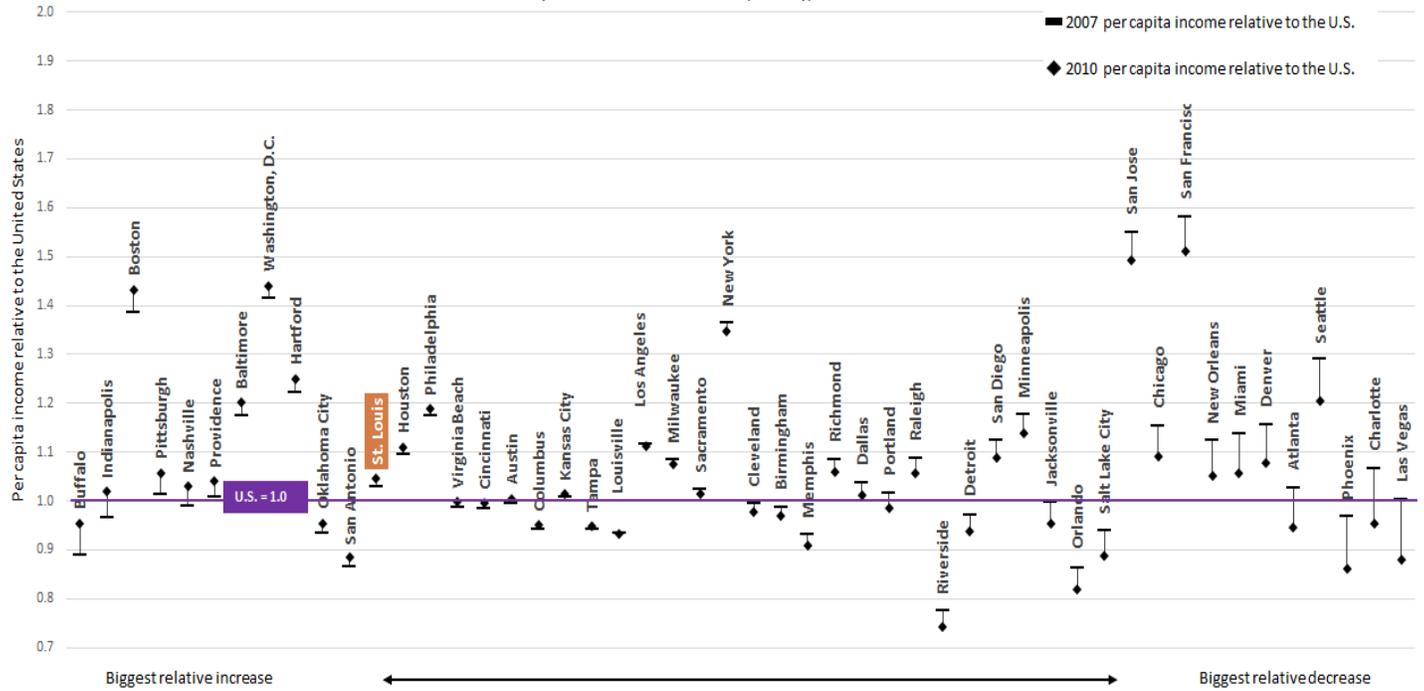


## 2007 to 2010

The bursting of the housing bubble resulted in the longest and deepest economic downturn since the Great Depression. Regions such as St. Louis that had faster income growth than the rest of the country tended to be the places overlooked by the excesses of the previous two bubbles. Technology-focused

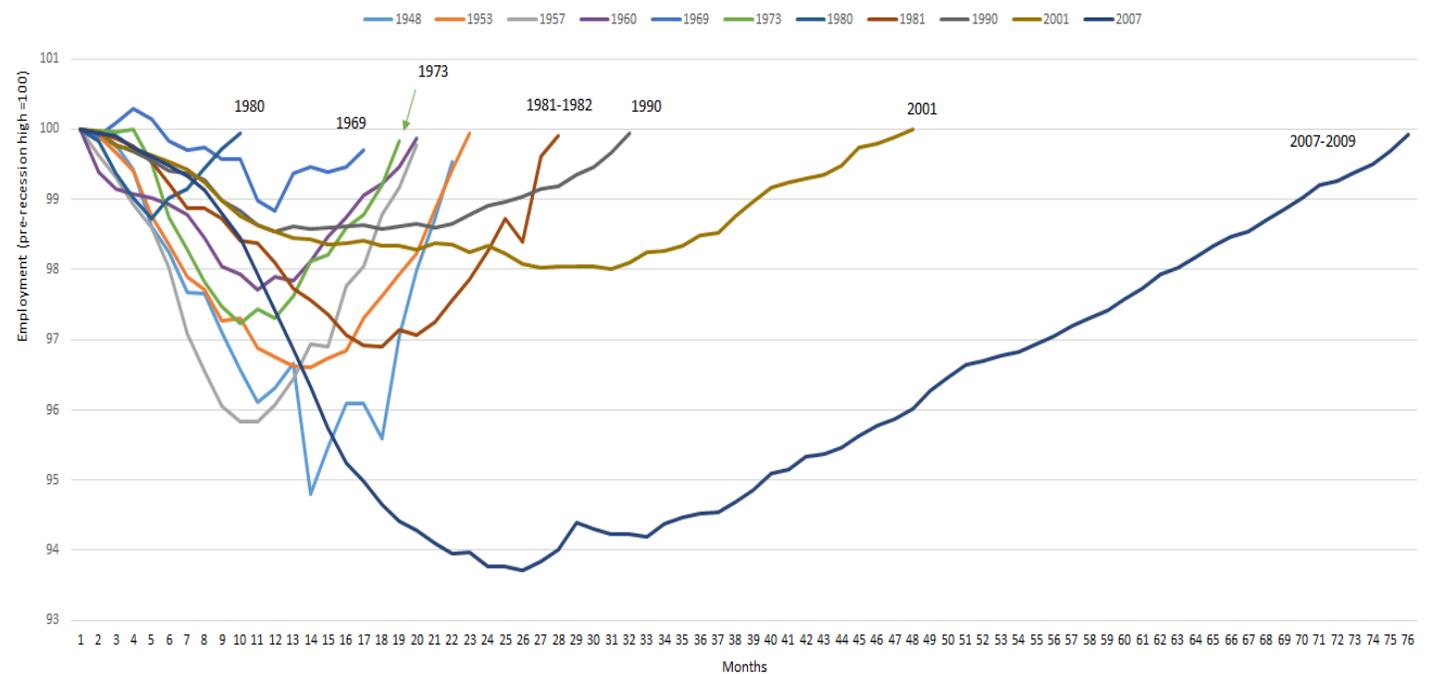
regions such as San Francisco, San Jose, and Seattle continued to struggle. Also experiencing declining income shares were regions that had experienced recent growth driven by construction and real estate, such as Miami, Charlotte, and particularly Las Vegas.

**Figure 6: Change in per Capita Income Relative to the United States**  
Metropolitan Statistical Areas (MSAs), 2007 to 2010



Source: Bureau of Economic Analysis (MAINC30)

**Figure 7: Postwar Recessions, Change in Employment**  
United States



Source: Bureau of Labor Statistics, Current Employment Statistics, Seasonally Adjusted

## 2010 to 2018

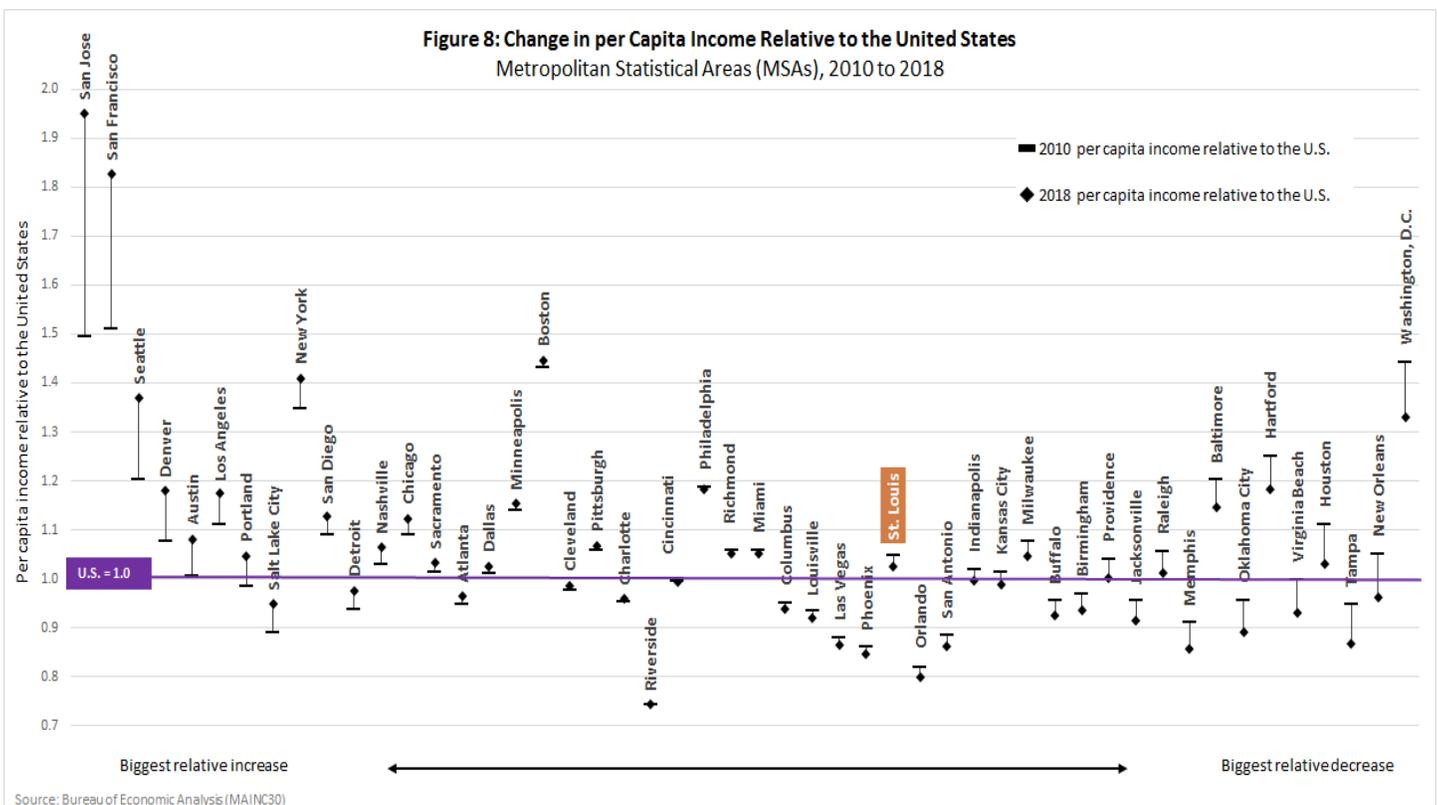
To revive the economy following the Great Recession, the Federal Reserve pursued a low-interest rate policy. From 2009 through 2015, interest rates hovered close to zero percent. Although rates have ticked upward over the last four years, they remain low by historical standards. With returns on low-risk bonds at historic lows, capital has flowed into investments that offer higher returns. These include equities, as well as alternatives to stocks and bonds such as private equity funds, hedge funds, and venture capital.

Venture capital investments have more than quadrupled since 2010, and in 2018 more than 60 percent of the deal value flowed to the Pacific Coast.<sup>15</sup> This may have played a role in the spectacular income growth in San Jose, San Francisco, and Seattle.

Per capita income in San Jose was nearly 50 percent higher than the national average in 2010. By 2018, Silicon Valley's PCI had shot up to nearly double that of the rest of the country. Not surprisingly, earnings in the computer manufacturing and information industries account for most of the difference between PCI in San Jose and the United States.

Financial income in the form of interest, dividends, and rent accounted for about 30 percent of the difference between San Francisco and the United States in 2018. Earnings in the professional, scientific, and technical services accounted for another 22 percent. The information industry accounted for about 15 percent of the difference.

Differences in dividends, interest, and rent account for about a third of the difference between PCI in Seattle and the United States. With major software headquarters including Microsoft, earnings in the information industry account for another 29 percent of the difference. As home to Amazon, it is not surprising that the "non-store retailers" industry accounts for 14 percent of the difference.



## Conclusion

In 2018, five of the nation's most populous 50 MSAs enjoyed per capita income levels that were at least 35 percent higher than that of the nation as a whole. Each also enjoyed much faster income growth than the rest of the country over the last half century.

For three of the five, dominance in information technology (IT) explains much of the difference in relative growth rates. Earnings in IT-related industries are strongly concentrated in San Jose, San Francisco, and Seattle. The other two, Boston and New York, also have solid shares of IT earnings, and further benefit from their traditional role as financial capitols.

A recent report by the Brookings Institution notes that the strong geographic concentration of IT-related earnings has created a divergence of income between a handful of coastal MSAs and the rest of the country. Brookings found that this

divergence is a grave national problem, condemning large portions of the country to underdevelopment. To remedy this situation, the report called for the federal government to establish a group of regional growth centers to spread the economic return on technology more evenly across the country. The report suggested that St. Louis may be a strong candidate to house a regional growth center.<sup>16</sup>

This report does not take a position on the desirability of this approach. However, the data presented here suggest that the increasing concentration of income and wealth in a handful of metropolitan regions is an issue of concern that deserves discussion, both locally and nationally.

Visit the Where We Stand website to access a new interactive tool that you can use to track changes in per capita income among the peer regions over the last 50 years and Where We Stand tables that rank St. Louis among the peer metropolitan regions. Please visit [www.ewgateway.org/www/PCI](http://www.ewgateway.org/www/PCI).

## Sources

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